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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,591

05/25/2006

Ruldof J.G.A. Van der Hoorn

3985-061646

4966

28289 7590 09/04/2008

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EXAMINER

DONDERO, WILLIAM E

ART UNIT

PAPER NUMBER

3654

MAIL DATE

DELIVERY MODE

09/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,591	Applicant(s) VAN DER HOORN, RULDOF J.G.A.	
	Examiner WILLIAM E. DONDERO	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-31 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

It is noted that the preliminary amendment should have listed all of the claims and the appropriate status identifier. Therefore, on the next response Applicant should list Claims 1-14 with the cancelled status identifier. Appropriate correction is required.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second roller (Claim 16), adjustable force (Claim 17) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: it is unclear which roller the claims are referring to when they state “a first roller” (Claims 15-20 and 31), “a second roller” (Claims 16-17), “a roller” (Claims 22 and 24), and “a moveable unit” (Claims 25 and 27).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-21, 28, and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to Claim 15, the phrase, “if a greater tension is required” renders the claim indefinite, because it is unclear whether or not the limitations that follow the phrase are being claimed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 31 is rejected under 35 U.S.C. 102(b) as being anticipated by Spahlinger et al. (US-5928579). Spahlinger et al. disclose a method of operation to bring parallel fibers from different supply points and with unequal exit force to a required substantially equal tension comprising the steps of transporting the parallel fibers 4 over a first set of one or more motorized cylindrical rotating elements 35,36, wherein a peripheral velocity of the first set of one or more motorized cylindrical rotating elements is greater than a velocity of the parallel fibers (Column 7, Lines 7-10) whereby at the end of this step the parallel fibers have a tension that is about zero; transporting the parallel fibers over a first roller 16, wherein the parallel fibers are transported without any substantial slippage (Figures 1-10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 18, 21-22, 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spahlinger et al. (US-5928579) in view Cowan (US-5190230).

Regarding Claim 15, Spahlinger et al. disclose a method of operation to bring parallel fibers from different supply points and with unequal exit force to a required substantially equal tension comprising the steps of transporting the parallel fibers 4 over a first set of one or more motorized cylindrical rotating elements 35,36, wherein a peripheral velocity

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of the first set of one or more motorized cylindrical rotating elements is greater than a velocity of the parallel fibers (Column 7, Lines 7-10) whereby at the end of this step the parallel fibers have a tension that is about zero; transporting the parallel fibers over a first roller 16, wherein the parallel fibers are transported without any substantial slippage (Figures 1-10). Spahlinger et al. are silent about if a greater tension is required, transporting the parallel fibers over a second set of one or more stationary or motorized rotating elements, wherein a peripheral velocity of the second set of one or more stationary or motorized cylindrical rotating elements is less than the velocity of the parallel fibers whereby at the end of this step a required collective tension is achieved. However, Cowan discloses if a greater tension is required, transporting parallel fibers S over a set of one or more stationary or motorized rotating elements 16, wherein a peripheral velocity of the set of one or more stationary or motorized cylindrical rotating elements is less than the velocity of the parallel fibers whereby at the end of this step a required collective tension is achieved (Figures 1-6; Column 2, Lines 3-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to add a second set of stationary or motorized cylindrical rotating elements of Cowan to the device of Spahlinger et al. to add an equal tension to all of the strands as taught by Cowan (Column 2, Lines 3-40) and Spahlinger et al. (Column 7, Lines 11-15). Regarding Claim 18, Spahlinger et al. disclose the first roller is motorized (Figures 1-10). Regarding Claim 21, Spahlinger et al. disclose the parallel fibers are connected to each other (Figures 1-10).

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Regarding Claim 22, Spahlinger et al. disclose a device to bring parallel fibers from different supply points and with unequal exit force to a required substantially equal tension comprising a first set of one or more motorized cylindrical rotating elements 35,36, wherein the parallel fibers 4 are transported over the first set of one or more motorized cylindrical rotating elements and the first set of one or more motorized cylindrical rotating elements has a peripheral velocity that is greater than a velocity of the parallel fibers (Column 7, Lines 7-10) whereby a tension of the parallel fibers is about zero; a roller 16, wherein the parallel fibers are transported over the roller without any substantial slippage (Figures 1-10). Spahlinger et al. are silent about a second set of one or more stationary or motorized rotating elements, wherein the parallel fibers are transported over the second set of one or more stationary or motorized cylindrical rotating elements and the second set of one or more stationary or motorized cylindrical rotating elements has a peripheral velocity of the second set of one or more stationary or motorized cylindrical rotating elements is less than the velocity of the parallel fibers whereby the tension of the parallel fibers reaches a required collective tension.

However, Cowan a set of one or more stationary or motorized rotating elements 16, wherein parallel fibers S are transported over the second set of one or more stationary or motorized cylindrical rotating elements and the second set of one or more stationary or motorized cylindrical rotating elements has a peripheral velocity of the second set of one or more stationary or motorized cylindrical rotating elements is less than the velocity of the parallel fibers whereby the tension of the parallel fibers reaches a required collective tension (Figures 1-6; Column 2, Lines 3-40). It would have been

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obvious to one of ordinary skill in the art at the time of the invention to add a second set of stationary or motorized cylindrical rotating elements of Cowan to the device of Spahlinger et al. to add an equal tension to all of the strands as taught by Cowan (Column 2, Lines 3-40) and Spahlinger et al. (Column 7, Lines 11-15). Regarding Claim 29, Spahlinger et al. disclose wherein the parallel fibers are threads, yarns, or any combination thereof (Figures 1-10). Regarding Claim 25, Spahlinger et al. disclose wherein a moveable unit 31.3 is placed at an approximate right angle to the parallel fibers between the first set of one or more motorized cylindrical rotating elements and the roller, wherein the moveable unit is equipped with a force absorber (Figure 5).

Claims 16-17, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spahlinger et al. (US-5928579) in view of Cowan (US-5190230) as applied to claims 15, 18, 21-22, 25 and 29 above, and further in view of Newton (US-2952393). Regarding Claims 16-17 and 30, Spahlinger et al. are silent about a motorized second roller is placed opposite the first roller and the parallel fibers are transported between the second roller and the first roller; and the first and second roller are pressed against each other with an adjustable force. However, Newton discloses a motorized second roller 7 is placed opposite a first roller 8 and parallel fibers 10 are transported between the second roller and the first roller; and the first and second roller are pressed against each other with an adjustable force (via flattened portion 13) (Figures 1-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the second motorized roller to the device of Spahlinger et al. in view of Cowan to help maintain and stabilize the tension as taught by Newton.

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Regarding Claim 28, Spahlinger et al. disclose the parallel fibers are threads, yarns, or any combination thereof (Figures 1-10).

Claims 19-20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spahlinger et al. (US-5928579) in view of Cowan (US-5190230) as applied to claims 15, 18, 21-22, 25 and 29 above, and further in view of Kinraide (US-2747251). Regarding Claims 19-20 and 24, Spahlinger et al. in view of Cowan is silent about a motorized endless belt, driven by two driving rollers, is placed against the first roller, the endless belt being situated to allow the endless belt to encircle a part of the circumference of the first roller; and the endless belt and roller can be moved towards each other. However, Kinraide discloses a motorized endless belt 3, driven by two driving rollers 4,5, is placed against first roller 2, the endless belt being situated to allow the endless belt to encircle a part of the circumference of the first roller; and the endless belt and roller can be moved towards each other (via 13,14,15) (Figures 1-3). It would have been obvious to add the endless belt of Kinraide to the device of Spahlinger et al. in view of Cowan to maintain and stabilize the tension on the parallel fibers as taught by Kinraide.

Claims 23 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spahlinger et al. (US-5928579) in view of Cowan (US-5190230) as applied to claims 15, 18, 21-22, 25 and 29 above, and further in view of Gelin (US-3966133). Regarding Claims 23 and 26, Spahlinger et al. in view of Cowan is silent about the first set of one or more motorized cylindrical rotating elements and the second set of one or more stationary or motorized cylindrical rotating elements are placed in a line on a first

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frame part and a second frame part, allowing the first frame part and the second frame part to mesh with each other whereby a partial encirclement by the parallel fibers of a surface of the first set of one or more motorized cylindrical rotating elements and the second set of one or more stationary or motorized cylindrical rotating elements, respectively, can be adjusted. However, Gelin discloses set of one or more cylindrical elements 24,25 placed in a line on a first frame part 28 and a second frame part 26, allowing the first frame part and the second frame part to mesh with each other (via 32) whereby a partial encirclement by the parallel fibers of a surface of set of one or more cylindrical elements can be adjusted (Figures 1-3). Because both Spahlinger et al. in view of Cowan and Gelin teach devices for supporting cylindrical tensioning elements, it would have been obvious of one of ordinary skill in the art to substitute the mounting device of Gelin for the mounting device of Spahlinger et al. in view of Cowan to achieve the predictable result of equalizing the tension over the parallel fiber and to have more flexibility in controlling the tension by using the amount of wrap around the elements as taught by Gelin.

Regarding Claim 27, Spahlinger et al. disclose a moveable unit 31 placed at an approximate right angle with the parallel fibers, wherein the moveable unit is equipped with a force absorber (Figures 1-10). Spahlinger et al. in view of Cowan and Gelin are silent about the moveable unit being placed immediately after the second set of one or more stationary or motorized cylindrical rotating elements and the first frame part and second frame part. However, one of ordinary skill in the art at the time of the invention would recognize it would have been obvious to place a moveable unit after the second

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set to act as a feedback system for the tensioning device as taught by Spahlinger et al. (Column 7, Lines 41-59).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM E. DONDERO whose telephone number is (571)272-5590. The examiner can normally be reached on Monday through Friday 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. E. D./
Examiner, Art Unit 3654
/Peter M. Cuomo/

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Supervisory Patent Examiner, Art Unit 3654